

CUP HOLDER

FIELD OF THE INVENTION

[0001] This invention relates to a cup holder for holding a cup or other drinking container on a seat, such as a stadium bench seat, a folding seat and various other seats.

BACKGROUND OF THE INVENTION

[0002] A problem that exists in many public events is the lack of holders for placing drinks. A number of venues, such as professional sports arenas, outdoor theatres, and high school and local sports parks, provide bench type seating for the spectators, wherein the spectators sit on long benches, each spectator sitting in close quarters to the spectator directly on either side. Other venues provide for folding chairs where each spectator has his or her own chair. Naturally, spectators would like to have a beverage of some sort to enjoy during these performances. However, the crowded nature of the seating arrangements and/or the lack of any holder for drinks requires placing the beverages on the ground, wedging them in between spectators, placing them in precarious positions, or holding them for the duration of the event, all of which can lead to spilled drinks or the drinks simply being in the way.

[0003] Other prior art devices have attempted to adequately provide a holder for such drinks. An example is US Patent No. 6,010,104, issued to Hanson et al., which is incorporated herein in its entirety. Hanson et al. discloses a combined seat and container holder that consists of an engagement portion that engages the back surface of the seat, a

rigid member extending across the seating surface of the seat and a holder for holding a drinking container. The holder can fit between spectators out of the way on the seat. The fan may also sit directly on holder. A problem with this holder, however, is that it holds an upper portion of the container above the seating surface in the way of a spectator sitting near the holder with a container therein, requiring the holder to be placed between spectators or between the legs of a spectator sitting on the seat. A further problem with such a holder is that a minor bump against the holder pushing the holder in a direction towards the rear portion of the seat would unhook the engagement portion from the seat causing the holder to fall from the seat.

SUMMARY OF THE INVENTION

[0004] It is thus an object of this invention to overcome the problems associated with the prior art and provide a cup holder for bench or folding seats that can effectively hold a beverage without the holder interfering with the spectator sitting in the seat and to provide a holder that cannot easily be bumped off the seat.

[0005] These and other objects are carried out and the problems overcome with a holder having a basket for holding the container near a front of the seat, a strip extending from the basket extending along the upper surface of the seat and a u-shaped portion engaging a rear portion. The basket holds the container lower than the seating surface to prevent the holder or the drink from interfering with the spectators sitting near the holder. The lower held basket also prevents the holder from being inadvertently moved towards the rear of the seat, preventing the u-shaped portion from disengaging from the seat. The u-

shaped portion at the rear portion of the holder prevents the strip from coming off the seat and provides leverage to hold the container.

[0006] In a preferred embodiment, basket is hinge coupled to the strip to allow for the holder to be folded for easier storage and carrying. A tab on the basket engages a slot in the strip so that the basket can be locked against the strip.

[0007] In another preferred embodiment, the holder has a flange portion that extends a distance from the basket. The flange prevents the holder from being inadvertently moved towards the rear of the seat, preventing the u-shaped portion from disengaging from the seat. It also allows for the container to be held by the holder a distance from the seat.

[0008] In another preferred embodiment, the basket and the flange are hinge coupled to the strip allowing for the holder to be folded for easier storage and carrying. A tab on the basket engages a slot in the strip so that the flange and basket can be locked against the strip.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] A description of the invention will follow with references to several drawings, in which:

FIG. 1 is a perspective view of the holder according to a preferred embodiment of the invention mounted on a bench seat;

FIG. 2 is a side view of the holder shown in FIG. 1;

FIG. 3 is a side view of the holder shown in FIG. 1 in a folded position;

FIG. 4 is a perspective view of a holder according to another embodiment of the invention mounted on a folding seat;

FIG. 5 is a side view of the holder shown in FIG. 4;

FIG. 6 is a side view of the holder shown in FIG. 4 in a folded position;

FIG. 7 is a perspective view of a holder according to another embodiment of the invention; and

FIG. 8 is a close up view of the slidable members of the holder shown in FIG. 7.

DETAILED DESCRIPTION OF THE INVENTION

[0010] A holder according to a first embodiment of the invention is shown in FIG. 1. The holder 100 comprises generally an engagement end 110, a central strip 120 and a basket 130. The holder 100 fits on the top, front and rear side of a seat. A bench seat having a rectangular cross section is shown in dotted lines in the figure for reference, however, it should be noted that the holder 100 can be adapted to fit over a plurality of seating surfaces, such as bench seats, foldable seats, padded seats, etc. or any other seat having a generally rectangular cross section, see for example, a folding seat shown in FIG. 4.

[0011] The holder 100 can be made of metal, plastic or any other material sufficient to clip the holder onto a seat and hold a container. Preferably the holder 100 is made of plastic via plastic injection molding.

[0012] The engagement end 100 has a generally u-shaped profile with a vertical wall 111 and a bottom wall 112 that fits around the rear and lower surface of the seat. These walls, in conjunction with a rear section 121 of strip 120 prevents the strip and the basket 130 from moving toward the front of the seat and prevents the strip at its rear section from vertically moving away from the seat. Such features keep the holder 100 in place and provide sufficient leverage for the basket 130 to hold a container without the holder coming off the seat.

[0013] The basket 130 is generally cup shaped having four ribs 131, 132, 133 and 134 along a length thereof and a bottom portion 135 forming a cross shape. Other numbers of ribs and bottom shapes can be used as well. The shape allows the basket 130 to adequately hold various shapes of containers and beverages. While this specific basket shape is used, various other shapes may also be used, such as a ring shaped holder (shown in US 6,010,104, discussed above), a ring in conjunction with a flange, a tapered cylinder, a ring having an embedded ring, and other basket shapes known to those in art and are capable of holding a drink container.

[0014] Connecting the cup shaped portion of the basket 130 to the strip 120 is a neck portion 136. The neck portion 136 is preferably made of a sufficient length to hold the container at a level below the seating surface. The neck portion 136 abuts the front surface of the seat making it capable of preventing the holder 100 from moving towards the rear. This additionally prevents the holder 100 from inadvertently being knocked from the seat by bumping the holder.

[0015] The strip 120 is an elongated piece of material that extends between the basket 130 and the engagement portion 110. As shown the strip 120 has a generally flat rectangular shape, however, it should be noted that other shapes are possible as long as it provides proper leverage between the basket and engagement portion to allow for the holder to hold a container. For example, the strip can be an elastic piece of material or a flexible material. The strip 120 should be of such a material to transfer the weight on the holder 100 holding a container to the rear engagement end.

[0016] The hinge mechanism, described in reference to FIGS. 1, 2 and 3, comprises a hinge 140 mounted between the neck portion 136 of basket 130 and the strip 120. The hinge 140 can be a traditional hinge affixed to the neck portion 136 and the strip 120 to allow each of the basket 130 and the strip to rotate about an axis formed by the hinge. Preferably the hinge 140 is made via the molding process by providing a weak area of plastic between thicker areas, allowing the weak area to break down when a bending action is performed on the holder. The hinge 140 may also be made by injecting a soft, more flexible plastic during the injection molding process.

[0017] The hinge 140 allows the basket 130 to rotate about the axis between a first position, shown in FIG. 2 wherein the basket is relatively perpendicular to the strip 120, to a second position, shown in FIG. 3 wherein the basket is relatively parallel to the strip. When the holder is in the second position, it is more compact allowing for easier carrying and packing of the holder when it is not in use.

[0018] To provide a locking mechanism to secure the holder in the second position, the basket has a tab 137 that operates in conjunction with a slot 122 in the strip. The tab 137 has a protrusion 138 that passes through the slot 122 and prevents the tab from being pulled back through the slot without a manipulation of the tab to align the protrusion with the slot. When a user of the holder folds the holder for storage or transport, the basket is rotated into the second position. The tab 137 with its protrusion passes through the slot until the second position is achieved. At this point the protrusion is abutting an outer surface 123 of strip, which locks the holder in the second position. To unlock the holder, the user must push the protrusion in the upper direction, shown in FIG. 3 by arrow U which releases the tab 137 from the slot allowing the basket 130 to move away from the strip 120.

[0019] A second embodiment of the holder is shown in FIGS. 4-6. It has a similar design for the engagement portion 110, the strip 120 and the basket 130, so a discussion of these features will not be repeated herein. This embodiment has a flange 150 extending from an under surface of strip 130 and running parallel to basket 130. The flange 150 is preferably made of similar material as the other components of the holder. It has a generally planar shape, but round or other shapes are also possible.

[0020] In use the flange 150 provides an abutment surface to prevent the strip from moving in relation to a seating surface when the holder is attached to a seating surface. The holder is shown in use in FIG. 4, and is attached to a folding seat (shown in dotted

lines). The engagement portion 110 is engaged to a rear side of the seat while the flange 150 abuts the front side of the seat. The components together prohibit movement in the direction of arrow P. Such allows for the holder to remain firmly in place and allows for the basket to have varying shapes and be extended a distance away from or below the seat surface.

[0021] In a further embodiment the holder has a hinge 141 between the flange and the strip 120. The hinge 141 operates in a similar manner and can be made of similar materials or made by similar processes as disclosed above. It allows rotation of the basket 130 and the flange 150 with respect to an axis formed by the hinge 141, allowing the basket and the flange to be folded against the strip, as shown in FIG. 6.

[0022] The hinge further has a locking mechanism comprising a tab 151 having a protrusion 152 on the flange 150 that fits into a slot 123 of the strip 120. The properties and operation are similar to the tab and slot design of the previous embodiment, thus a detailed description will not be repeated.

[0023] In an additional embodiment, shown in FIGS. 7 and 8, the holder is slidable to allow for the holder to fit on a variety of seat widths or types. The strip 130 is provided with two slidable members 125 and 126 which overlap or telescope into each other horizontally. A sufficient amount of friction between the telescoping members would allow them to remain connected when the holder is in use.

[0024] Although the present invention has been described and illustrated in detail regarding specific examples of cup holders, such explanations are to be clearly understood that the same are by way of illustration and example only, and are not to be taken by way of limitation. Other modifications of the above examples, which may be made by those having ordinary skill in the art, remain within the scope of the invention. Thus, the spirit and scope of the present invention should be defined only by the terms of the claims.